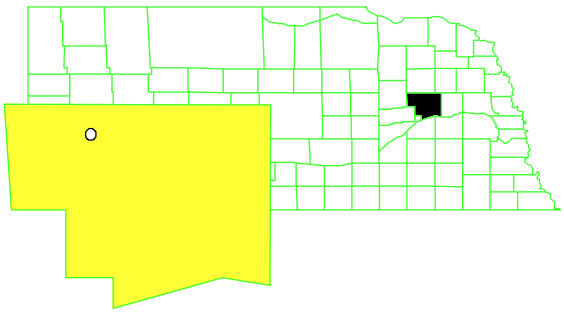
LINDSAY MANUFACTURING CO.

NEBRASKA
EPA ID# NED068645696

EPA Region 7
City: Lindsay
County: Platte County
Other Names:



SITE DESCRIPTION

The Lindsay Manufacturing Company generated sulfuric acid waste from a galvanizing process at its plant. The wastes were discharged into an unlined pond for at least 10 years. The pit was closed in 1983, when three monitoring wells showed contamination. The site is surrounded by agricultural land. Approximately 3,000 people live within a 3-mile radius of the site, with the nearest residence located 300 feet away.

Site Responsibility:

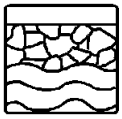
This site is being addressed through Federal, State, and potentially responsible parties' actions.

NPL LISTING HISTORY	
Proposed Date:	06/24/88
Final Date:	10/04/89
Deleted Date:	

THREATS AND CONTAMINANTS

Description: On-site groundwater contains heavy metals including zinc, iron, cadmium, chromium, and lead from former process wastes. Off-site groundwater contains heavy metals including cadmium, zinc, and volatile organic compounds (VOCs). VOCs also have been identified in the perched sand channel in the northern half of the site, in clay soils in the area around the northern quarter of the main plant, and between the main plant and the southern end of the galvanizing building. People could be exposed to contaminants by drinking water from

contaminated private wells, by direct contact with contaminated water, by inhaling contaminants released during water use, or by eating food in which contaminants have bioaccumulated.



CLEANUP APPROACH

Response Action Status

Initial Actions: In 1984, Lindsay began operating an interim pump and treat system, whereby the ground water is treated by neutralizing and removing contaminants. A second extraction was installed 1989 to control off-site migration of contaminants and increase the radius of influence. Off-site monitoring wells show that the project is controlling the migration of contaminants from the site.

Entire Site: Lindsay began a study of the nature and extent of contamination remaining at the site, as well as the alternative technologies for cleanup. The study was completed in 1990. Based on the results of the study, the EPA selected a remedy that included a pilot study to evaluate the feasibility of vacuum extraction of on-site soils, installation of such a system if it is deemed practical, enhancement and utilization of the existing groundwater extraction and treatment systems, installation of additional groundwater monitoring wells, installation of an additional extraction well, and continued monitoring of the groundwater collection/treatment system during cleanup activities. Lindsay began the technical design for these activities in 1992. In early 1993, a third extraction well became operational to assist in pumping and treating the groundwater. The soil vapor extraction (SVE) pilot study was concluded in early 1993. Pilot results showed that a full-scale system is practicable. Design of the full-scale system was completed in mid-1994; construction began shortly thereafter and the SVE system became operational in early 1995. In 1996, EPA evaluated the SVE system and determined site specific remediation goals. These goals have been attained and verified. Once verified, the SVE system equipment was decommissioned and the site restored. EPA also evaluated the use of irrigation as a means for disposal of the removed groundwater. EPA modified the groundwater pumping and is allowing the pumped water to be disposed by irrigation. This reduced the operating costs by approximately $100,000 annually a 3-month treatability study began in May 1998 to evaluate the pumping of one monitoring well to capture and contain the remaining contaminants. EPA and NDEQ will evaluate the modification in the fall 1998 and determined that pumping the one monitoring well controlled the plume. EPA and NDEQ evaluated the remedial action yearly to determine the extraction rates and locations for the next year.

Description:

Site Facts: In April 1992, a Consent Decree was signed that required the potentially responsible parties to design and implement the remedy and clean up the site under

EPA supervision.

ENVIRONMENTAL PROGRESS

All construction at the site is complete. Quarterly ground water results show the reduction in the contaminant levels both on-site and off-site. Use of irrigation as a disposal option will allow for the beneficial reuse of the extracted ground water while reducing the overall remediation costs. Verification of the soil vapor extraction clean up levels was completed. Restoration of the ground water is moving forward. A 3-month treatability is underway. The study uses one monitoring well as the extraction well. EPA and NDEQ will evaluate the results of this study in the fall 1998. Soil gas extraction wells have been closed. Several ground water monitoring wells are no longer needed have been closed according to NDOH's title 178 procedures.

SITE REPOSITORY

Columbus Public Library, 2504 14th Street, Columbus, NE 68801

Superfund Records Center
901 N. 5th St.
Kansas City, KS 66101
Mail Stop SUPR
(913)551-4038

REGIONAL CONTACTS

SITE MANAGER:	Diane Easley
E-MAIL ADDRESS:	easley.diane@epa.gov.
	(913) 551-7797
COMMUNITY INVOLVEMENT COORDINATOR:	Diane Huffman
PHONE NUMBER:	(913) 551-7544
PUBLIC INFORMATION CENTER:	
E-MAIL ADDRESS:	
STATE CONTACT:	Quzi Salahuddin
PHONE NUMBER:	(402) 471-2224

MISCELLANEOUS INFORMATION

STATE:	
PACIFIC ISLAND(S):	
	075J
CONGRESSIONAL DISTRICT:	03
EPA ORGANIZATION:	SFD-SUPR/IANE

MODIFICATIONS